

REMARKS

Claims 1-19 are pending. Claims 3-5 and 10-19 were previously withdrawn. Claims 1 and 9 are hereby amended. Claims 20 and 21 are hereby added. Claim 7 is hereby cancelled. The amendments are supported by the specification and the originally filed claims. No new matter is added. Applicant respectfully submits that this amendment is fully responsive to the office Action dated June 5, 2006.

SPECIFICATION

The title of the invention was objected to because “it is not descriptive”. Accordingly, applicant hereby amends the title to recite: *Method for Manufacturing a Semiconductor Device Suitable for the Formation of a Wiring Layer*.

CLAIM REJECTIONS – 35 U.S.C. §112

Claims 1-2 and 6-9 were rejected under 35 U.S.C. §112, second paragraph, because the phrase “etching the third hard mask with the fourth hard mask” in the claim 1 and the other similar phrases are unclear and indefinite to the Examiner. Accordingly, to expedite prosecution and clarify the subject matter of the present invention, Applicant hereby amends these claims to recite, for example, “etching the third hard mask by using the fourth hard mask” (or similar expressions.)

Furthermore, the Examiner points out that the phrase “interlayer dielectric” in the claim 1, lacks antecedent basis. Applicant hereby amends this phrase to recite, “interlayer insulating film”.

Accordingly, Applicant respectfully requests that the Examiner withdraw the §112 rejection of these claims.

CLAIM REJECTIONS – 35 U.S.C. §102

Claims 1-2, 6 and 9 were rejected under 35 U.S.C. 102(e) as being anticipated by *Huang et al* (US Pub. No. 2003/0119305A1.) This rejection is respectfully traversed at least the following reasons.

Claim 1 is hereby amended to incorporate the subject matter of claim 7 (and claim 7 has been cancelled.) Accordingly, amended claim 1 requires that a thickness of the third hard mask is more than twice that of the first hard mask. *Huang et al* fails to teach or suggest this feature.

Claim 7 was also rejected under 35 U.S.C. 103(a) as being unpatentable over *Huang et al*. However, claim 7 is hereby cancelled. (e.g., amended claim 1 is amended to incorporate claim 7.)

Anticipation requires the presence of each and every elements of the claimed invention, as arranged in the claims. However, *Huang et al* fails to teach or suggest, “A thickness of the third hard mask is more than twice that of the first hard mask.” Accordingly the anticipation rejection is improper and should be withdrawn.

For example, *Huang et al* merely discloses that the mask films 58 through 61 range from about 200 Å to 1000 Å each in thickness. However, the reference is silent on the thickness of each of the mask films and it does NOT teach or suggest that the thickness of the third hard mask is different from the first hard mask. Furthermore, the figures show that all mask films in *Huang*

et al are the same thickness. Therefore, although the mask film can have thickness in range from about 200 Å to 1000 Å, the reference does NOT teach or suggest that each film has the different thickness each other, e.g., all films may have a thickness of 200 Å or 1000 Å.

Furthermore, the structure in *Huang et al* has two set of the dielectric layer (dielectric layers 51 and 52). The third mask film 60 in *Huang et al* might be corresponding to the third hard mask of the amended claim 1, but the third mask film 60 is required only to resist as mask while the depth of one dielectric layer is being etched because the dielectric layers 51, 52 are etched by two steps. (See figs. 23 and 24.) This two step etching method described in *Huang et al* makes the process more complicated.

For at least the above reasons, the amended claim 1 and new claims 20 and 21 distinguish over *Huang et al*. Accordingly, Applicant respectfully request reconsideration and allowance of the pending claims.

In view of the amendments and remarks above, Applicant respectfully submits that this application is in condition for allowance and requests favorable action thereon. If the Examiner believes that any further action by Applicant is desirable in order to place this application in condition for allowance, then the Examiner is invited to contact Applicant' undersigned attorney.

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Amendment under 37 C.F.R. §1.111
Amendment filed: September 5, 2006

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

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